

CLAIMS

We claim:

- 5 1. In a communication device including a wireless applications protocol (WAP) operating environment, an apparatus for enabling an external function from within the WAP operating environment comprising:
 - a external function interface coupled to the WAP operating
 - environment and operable to receive from the WAP operating environment a
 - 10 request to launch an external application;
 - a handle configured to permit control of the external application from
 - within the WAP operating environment, the handle being generated by the
 - external function interface and returned to the WAP operating environment
 - responsive to the request to launch the external application; and
 - 15 a library associated with the external application, the library including
 - information to initiate a connection between the external application and the
 - WAP operating environment, wherein the handle corresponds to the
 - connection.
- 20 2. The apparatus of claim 1, wherein the external function interface includes a list of external applications available to be launch from within the WAP operating environment.
3. The apparatus of claim 2, wherein the list of external applications is
- 25 dynamically generated upon an initialization of the WAP operating environment on the communication device.
4. The apparatus of claim 2, wherein the list of external applications is
- dynamically generated on a periodic basis.
- 30 5. The apparatus of claim 1, wherein the external function interface comprises a plug-in to the WAP operating environment.
6. The apparatus of claim 1, wherein the handle comprises an instance
- 35 identifier.

7. The apparatus of claim 1, wherein the library comprises code embedded within the external application.

5 8. The apparatus of claim 1, wherein the library is separate from and accessible by the external application.

9. The apparatus of claim 1, wherein the apparatus enables the WAP application to discover, launch and control the external application.

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10. In a wireless communication network including a mobile station adapted according to the Wireless Applications (WAP) protocol to provide a WAP operating environment, a method for enabling an external function within the WAP operating environment comprising the steps of:

15 receiving from the WAP operating environment a request to launch an application external to the WAP operating environment;

generating a handle associated with the application, the handle being configured to permit control of the external application from within the WAP operating environment; and

20 providing a library associated with the external application, wherein the library includes information to to initiate a connection between the external application and the WAP operating environment, wherein the handle corresponds to the connection.

25 11. The method of claim 10, comprising the step of generating a list of available external applications.

12. The method of claim 11, wherein the step of generating a list of available external applications comprises generating upon an initialization of
30 the WAP operating environment a list of available external applications.

13. The method of claim 11, wherein the step of generating a list of available external applications comprises periodically updating the list of external applications.

14. The method of claim 10, wherein the step of generating a handle comprises generating a connection identifier, the connection being associated with the external application.

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15. The method of claim 14, wherein the step of generating an instance identifier comprises providing the instance identifier to a register within the WAP environment.

10 16. The method of claim 10, wherein the step of providing a library associated with the external application comprises providing a library element and associating the library element with the external application.

15 17. The method of claim 10, wherein the step of providing a library associated with the external application comprises providing the information for facilitating the function of the external application within the external application.